ABSTRACT

A processing system executes an emulation patch for a guest virtual machine (VM) of the processing system. In one embodiment, the emulation patch includes data to facilitate identification of a routine to emulate a guest instruction. After executing the emulation patch for the guest VM, the processing system may use the data to find an emulation routine for emulating the guest instruction. The processing system may transfer control from the guest VM to a virtual machine monitor (VMM) in response to execution of the emulation patch, without saving a trap frame. The VMM may then find and execute the emulation routine for the guest instruction without decoding the guest instruction. A break instruction with an immediate value, for example, may be used for the emulation patch. The immediate value may be used for finding the emulation routine. Other embodiments are described and claimed.